

ABSTRACT OF THE DISCLOSURE

A wireless sensor system of the present invention includes wireless sensor units (4A, 4B) and a sensor signal receiving unit (5). The sensor units (4A, 4B) have sensors (6A, 6B), an electric power receiver (8A, 8B) for securing the electric power from an electromagnetic wave of a power feeding frequency f_1 through a tuning circuit and a detecting and rectifying circuit, and sensor signal transmitters (9A, 9B) for transmitting the signals outputted from the sensors as a wireless sensor signal of the electromagnetic wave of unique frequencies f_2 and f_3 different from the power feeding frequency f_1 . The sensor signal receiving unit (5) has an electric power transmitter (12) for transmitting the electromagnetic wave of the power feeding frequency f_1 to the units (4A, 4B) and a sensor signal receiver (13) for receiving wireless the sensor signals of the respective frequencies f_2 and f_3 transmitted from the units (4A, 4B).